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10/765,348

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Istvan Cseri

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EXAMINER

WU, YICUN

ART UNIT

PAPER NUMBER

2165

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/03/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/765,348

Applicant(s)

CSERI ET AL.

Examiner

Yicun Wu

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Patent Examiner
Technology center
2100

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

III. DETAILED ACTION

1. Claims 1-41 are presented for examination.

Examiner's Remarks

2. a) Examiner acknowledges that the finality made on office action mailed 10/04/2006 is premature, and is hereby withdrawn. Record has been corrected and updated.

b) In response to Applicants amendments and remarks, Claims Rejections under 35 USC § 101 are hereby withdrawn.

c) Applicant argues:

(1) "Cheng et al fails to teach or suggest a method of producing query results wherein the organization of the query results is expressly requested within the query itself".

(2) "Cheng et al cannot be said to teach or suggest a query including mode information.

Examiner disagree.

With respect to the 1st argument, Examiner believes (col. 21, lines 7-9) show that the organization of the query results could be expressly requested within the query itself.

With respect to the 2nd argument, Examiner believes information (col. 23, lines 56-60 and col. 24, lines 7-40) show that the it contains mode information.

EXEC SQL SELECT id, name

FROM first_book

WHERE xmlContains (book, '/book/title' , 'Programming')=1

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Clearly teaches an extensible Markup Language data stream organization, a query specifying for organizing information , a query defining the XML data, etc.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated over Cheng et al. (U.S. Patent No. 6,366,934).

As to claims 1, 9, 11, 13, 26 and 32, Cheng et al. discloses a computerized system comprising:

a database server (col. 3, lines 34-35) operable for receiving a query (i.e. querying) (col. 3, lines 48-60) and col. 23, lines 1-35), the query including mode information (col. 23, lines 56-60 and col. 24, lines 7-40) that specifies (col. 21, lines 7-9), within the query itself (col. 21, lines 7-9), a hierarchical data stream organization (i.e. structure search . col. 24, lines 35-40 and Col. 15, lines 46-48), and generating a rowset in response to the query (i.e. retrieving structured documents) (col. 3, lines 48-60); and

a rowset processor (col. 3, lines 48-60), operable for receiving and processing the mode information (col. 23, lines 56-60 and col. 24, lines 7-40) of the query and the rowset, to generate a data stream organized (i.e. retrieving structured documents) (col. 3, lines 48-60) according to

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the hierarchical data stream organization (i.e. document tree structure. Col. 15, lines 46-48) specified by the mode information (col. 21, lines 7-9).

As to claim 2, Cheng et al. discloses a computerized system, wherein the query is a structured query language (SQL) query (Cheng et al. col. 6, lines 48-57).

As to claims 3 and 21, Cheng et al. discloses a computerized system, wherein the query is a flat query (Cheng et al. col. 6, lines 48-57).

As to claim 4, Cheng et al. discloses a computerized system, wherein the hierarchical data stream is an eXtensible Markup Language (XML) data stream (i.e. XML contents and attribute values) (Cheng et al. col. 21, lines 24-27).

As to claim 5, Cheng et al. discloses a computerized system wherein the mode information comprises one or more table names (i.e. table. col. 23, lines 55-60).

As to claim 6, Cheng et al. discloses a computerized system, wherein the mode information comprises an ordered list of one or more tables (col. 23, lines 55-60 and col. 24, lines 7-40).

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As to claim 7, Cheng et al. discloses a computerized system, wherein the mode information comprises

explicitly defining a nesting of requested data and a naming of requested columns in a hierarchical data stream (col. 23, lines 65-67 and col. 24, lines 7-40) .

As to claim 8, Cheng et al. discloses a computerized system, wherein the rowset processor transforms the rowset into a universal table (i.e. a buffer) (Cheng et al. col. 20, lines 54-55) subsequently processed to generate a hierarchical data stream (col. 24, lines 7-40).

As to claims 10, 12 and 25 , Cheng et al. discloses a computerized system, comprising:
a client coupled to the rowset processor, the client is capable of receiving the hierarchical data stream (fig. 1).

As to claim 16, Cheng et al. discloses a computerized system, wherein the query includes a clause directing the rowset processor to return the XML data stream (col. 23, lines 65-67 and col. 24, lines 7-40).

As to claim 18, Cheng et al. discloses a computerized system wherein
the mode information defining the XML data stream organization is primary-foreign key information included in the query (col. 13, lines 1525).

As to claim 19, Cheng et al. discloses a computerized system wherein

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mode information defining the XML data stream organization is implied in the ordering of a number of tables included in the query (i.e. formulate relational operations on the tables) (Cheng et al. col. 6, lines 61-65) and (Cheng et al. col. 4, lines 1-5).

As to claim 20, Cheng et al. discloses a computerized system wherein the information defining the XML data stream is explicitly provided in the query (col. 6, lines 61-65) and (Cheng et al. col. 21, lines 2-19).

As to claim 22 and 33, Cheng et al. discloses a computerized system further comprising: wherein the query is a nested query (i.e. structural search) (col. 4, lines 1-5).

As to claim 23, Cheng et al. discloses a computerized system wherein the rowset processor is a subsystem of the database system (col. 3, lines 34-47).

As to claim 24, Cheng et al. discloses a computerized system wherein the rowset processor is an add-on to the database system. (i.e. extender. col. 3, lines 34-47).

As to claim 27, Cheng et al. discloses a computerized system wherein transforming the rowset into an XML element comprises:

mapping each non-null column value of the rowset to an attribute of the XML element (Cheng et al. col. 21 lines 49 to col. 22, lines 7).

As to claim 28, Cheng et al. discloses a method of generating an XML data stream from a query, the method comprising:

creating a query (i.e. querying) (col. 3, lines 48-60) and col. 23, lines 1-35), the query including mode information that specifies (col. 23, lines 56-60 and col. 24, lines 7-40), within the query itself (col. 23, lines 56-60 and col. 24, lines 7-40), an eXtensible Markup Language (XML) data stream organization (i.e. structure search . col. 24, lines 35-40 and Col. 15, lines 46-48) by a primary foreign key relationship (Cheng et al. col. 13, lines 15-25);

transmitting the query to a database server to generate a rowset (col. 3, lines 48-60); transforming the rowset into a nested XML tree by using the primary-foreign key relationship to determine (Cheng et al. col. 13, lines 15-25) nesting in the nested XML tree (col. 23, lines 56-60 and col. 24, lines 7-40); and

processing the nested XML tree to return the XML data stream, organized according to the determined nesting in response to the query (col. 23, lines 56-60 and col. 24, lines 7-40).

As to claim 29, Cheng et al. discloses a method of generating a method, wherein creating a query containing a primary foreign key relationship comprises:

ordering tables in the query to produce an organization of the XML data stream for a one to many relationship (col. 23, lines 56-60 and col. 24, lines 7-40).

As to claim 30, Cheng et al. discloses a method wherein transforming the rowset into a nested XML tree by using the primary-foreign key relationship included in the query to determine nesting in the nested XML tree comprises:

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forming a nesting schema from the nested XML tree (col. 23, lines 56-60 and col. 24, lines 7-40); and

utilizing the nesting schema to transform the rowset into a nested XML tree (col. 23, lines 56-60 and col. 24, lines 7-40).

As to claim 31, Cheng et al. discloses a method wherein processing the nested XML tree to return the XML data stream in response to the query comprises:

representing each table listed in the query that has at least one column in a query result as an XML element.

As to claims 34 and 37, Cheng et al. discloses a computer-readable medium having computer-executable instructions for performing operations comprising:

forming a query (i.e. querying) (col. 3, lines 48-60) and (col. 23, lines 1-35), in which the XML data stream has an organizational structure defined in the query (col. 23, lines 56-60 and col. 24, lines 7-40) ;

transmitting the query to a database server (fig. 1) to generate a rowset (col. 23, lines 56-60 and col. 24, lines 7-40) ; and

processing the rowset to produce the XML data stream in response to the query (col. 23, lines 56-60 and col. 24, lines 7-40) .

As to claim 35, Cheng et al. discloses a computer readable medium, wherein processing the rowset to return the XML data stream in response to the query comprises:

transforming the rowset into a universal table (col. 20, lines 54-55);; and

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processing the universal table to produce the XML data stream (col. 20, lines 54-55);.

As to claim 36, Cheng et al. discloses a computer readable medium, wherein transforming the rowset into a universal table comprises:

executing a union over all selections in the query (i.e. union(R1 ,r2)(Cheng et al. col. 17, lines 41-61)..

As to claim 39, Cheng et al. discloses a method wherein the organizational structure is one or more of the group comprising

one or more table names (i.e. table. col. 23, lines 55-67), an ordered list of one or more tables (col. 23, lines 55-67), and

an explicit definition of a nesting of requested data and a naming of requested columns in the hierarchical data stream (col. 24, lines 7-40).

As to claim 41, Cheng et al. discloses a method 1, wherein the query further comprises one or more of element tags and parent tags (col. 24, lines 7-40).

5. As to claims 14-15, 17, 38 and 40, the limitations of these claims have been noted in the rejection above. They are therefore rejected as set forth above.

Conclusion

6. **THIS ACTION IS MADE FINAL**, Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory- period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136 (a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply-expire later than SIX MONTHS from the mailing date of this final action.

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Points of contact

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yicun Wu whose telephone number is 571-272-4087. The examiner can normally be reached on 8:00 am to 4:30 pm, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Yicun Wu
Patent Examiner
Technology Center 2100



December 22, 2006